

I claim:

1. A fluid fitting comprising:

a shank having a bore formed therethrough for receiving and passing fluid from a fluid supply;

5 a hoop member attached to said shank and having a fluid port formed therein in fluid communication with said bore, said hoop member defining a hoop body and two opposing hoop edges, and having an axis directed through the radial center thereof;

a first tapered boss extending outwardly from a first of said  
10 opposing hoop edges, said first tapered boss defining a first sealing surface;

a second tapered boss extending outwardly from a second of said opposing hoop edges, said second tapered boss defining a second sealing surface; and

a bolt for fitment through said hoop member and for threaded securement in a fluid receiving support structure, said bolt including a bolt sealing  
15 surface complementary to said first sealing surface, said bolt being used to secure said hoop member to said fluid receiving support structure and to enable fluid flow from said supply, through said fitting to said fluid receiving support structure.

2. A fluid fitting according to claim 1 wherein said bolt is formed with a  
20 fluid channel therein for fluid communication with said hoop member and said shank member for flow therethrough to said fluid receiving support structure.

3. A fluid fitting according to claim 1 wherein said first tapered boss includes a first inner tapered wall member and a first outer tapered wall member connected to said first inner tapered wall member, with said first sealing surface being defined by said first inner tapered wall member, and wherein said bolt sealing surface is complementary to said first sealing surface for sealing engagement therewith.

3. A fluid fitting according to claim 2 and further comprising a first joiner surface connecting said first inner tapered wall member and said first outer tapered wall member.

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4. A fluid fitting according to claim 1 wherein said second tapered boss includes a second inner tapered wall member, a second outer tapered wall member connected to said second inner tapered wall member, with said second sealing surface being defined by said second outer tapered wall member.

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5. A fluid fitting according to claim 4 and further comprising a second joiner surface connecting said second inner tapered wall member and said second outer tapered wall member.

20 6. A fluid fitting according to claim 1 wherein said first tapered boss includes a first inner wall member, a first outer tapered wall member and a first joiner surface connecting said first inner tapered wall member and said first outer tapered wall member, with said first sealing surface being defined by said first joiner surface and wherein said

bolt sealing surface is complementary to said first sealing surface for sealing engagement therewith.

7. A fluid fitting according to claim 6 wherein said first joiner surface is  
5 formed as an edge.

8. A fluid fitting according to claim 6 wherein said second tapered boss includes a second inner wall member, a second outer tapered wall member connected to said second inner wall member, with said second sealing surface being defined by said  
10 second outer tapered wall member.

9. A fluid fitting according to claim 8 and further comprising a second joiner surface connecting said second inner wall member and said second outer tapered wall member.

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10. A fluid fitting comprising:

a shank having a bore formed therethrough for receiving and passing fluid from a fluid supply;

a hoop member attached to said shank and having a fluid port  
20 formed therein in fluid communication with said bore, said hoop member defining a hoop body and two opposing hoop edges, and having an axis directed through the radial center thereof;

a first tapered boss extending outwardly from a first of said opposing hoop edges, including a first inner tapered wall member and a first outer tapered wall member connected to said first inner tapered wall member, with said first inner tapered wall member defining a first sealing surface;

5 a second tapered boss extending outwardly from a second of said opposing hoop edges, said second tapered boss defining a second sealing surface; and

a bolt for fitment through said hoop member and for threaded securement in a fluid receiving support structure, said bolt having a bolt sealing surface formed thereon complementary to said first sealing surface formed thereon and a fluid  
10 channel formed therein for fluid communication with said hoop member and said shank member for flow therethrough to said fluid receiving support structure, thereby maintaining integrity of fluid flow from said supply, through said fitting to said fluid receiving support structure.

15 11. A fluid fitting according to claim 10 wherein said second tapered boss includes a second inner tapered wall member, a second outer tapered wall member connected to said second inner tapered wall member, with said second sealing surface being defined by said second outer tapered wall member.

20 12. A fluid fitting according to claim 11 and further comprising a second joiner surface connecting said second inner tapered wall member and said second outer tapered wall member.

13. A fluid fitting comprising:

a shank having a bore formed therethrough for receiving and passing fluid from a fluid supply;

5 a hoop member attached to said shank and having a fluid port formed therein in fluid communication with said bore, said hoop member defining said fluid port, a hoop body and two opposing hoop edges, and having an axis directed through the radial center thereof;

a first tapered boss extending outwardly from a first of said opposing hoop edges, including a first inner wall member, a first outer tapered wall member and a first joiner surface connecting said first inner tapered wall member and said first outer tapered wall member, with said first sealing surface being defined by said first joiner surface;

a second tapered boss extending outwardly from a second of said opposing hoop edges, said second tapered boss defining a second sealing surface; and

15 a bolt for fitment through said hoop member and for threaded securement in a fluid receiving support structure, said bolt having a bolt sealing surface complementary to said first sealing surface formed thereon and a fluid channel formed therein for fluid communication with said hoop member and said shank member for flow therethrough to said fluid receiving support structure, thereby maintaining integrity of fluid flow from said supply, through said fitting to said fluid receiving support structure.

14. A fluid fitting according to claim 13 wherein said first joiner surface is formed as an edge.

15. A fluid fitting according to claim 13 wherein said second tapered boss includes a second inner wall member, a second outer tapered wall member connected to said second inner wall member, with said second sealing surface being defined by said  
5 second outer tapered wall member.

16. A fluid fitting according to claim 15 and further comprising a second joiner surface connecting said second inner tapered wall member and said second outer tapered wall member.  
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17. A fluid fitting comprising:

- a shank having a bore formed therethrough for receiving and passing fluid from a fluid supply;
- a hoop member attached to said shank and having a fluid port  
15 formed therein in fluid communication with said bore, said hoop member defining said fluid port, a hoop body and two opposing hoop edges, and having an axis directed through the radial center thereof;
- a first tapered boss extending outwardly from a first of said opposing hoop edges, including a first inner tapered wall member and a first outer  
20 tapered wall member connected to said first inner tapered wall member, said first inner tapered wall member defining a first sealing surface;
- a second tapered boss extending outwardly from a second of said opposing hoop edges, including a second inner tapered wall member, a second outer

tapered wall member connected to said second inner tapered wall member, with said second outer tapered wall member defining a second sealing surface;

a first joiner surface connecting said first inner tapered wall member and said first outer tapered wall member;

5 a second joiner surface connecting said second inner tapered wall member and said second outer tapered wall member; and

a bolt for fitment through said hoop member and for threaded securement in a fluid receiving support structure, said bolt being formed with a bolt sealing surface complementary to said first sealing surface, and having a fluid channel  
10 formed therein for fluid communication with said hoop member and said shank member for flow therethrough to said fluid receiving support structure, thereby maintaining integrity of fluid flow from said supply, through said fitting to said fluid receiving support structure.

15 18. A fluid fitting comprising:

a shank having a bore formed therethrough for receiving and passing fluid from a fluid supply;

a hoop member attached to said shank and having a fluid port formed therein in fluid communication with said bore, said hoop member defining said  
20 fluid port, a hoop body and two opposing hoop edges, and having an axis directed through the radial center thereof;

a first tapered boss extending outwardly from a first of said opposing hoop edges, including a first inner wall member, a first outer tapered wall

member and a first joiner surface connecting said first inner tapered wall member and said first outer tapered wall member, with said first joiner surface defining a first sealing surface;

5 a second tapered boss extending outwardly from a second of said opposing hoop edges, including a second inner wall member, a second outer tapered wall member connected to said second inner wall member, with said second outer tapered wall member defining a second sealing surface; and

a bolt for fitment through said hoop member and for threaded securement in a fluid receiving support structure, wherein said bolt is formed with a bolt  
10 sealing surface complementary to said first sealing surface with said bolt having a fluid channel formed therein for fluid communication with said hoop member and said shank member for flow therethrough to said fluid receiving support structure, thereby maintaining integrity of fluid flow from said supply, through said fitting to said fluid receiving support structure.

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19. A fluid fitting according to claim 18 wherein said first joiner surface and said second joiner surface are each formed as an edge.

20. A method for directing fluid flow from a fluid supply to a threaded  
20 opening in a fluid receiving support structure, said method comprising the steps of:

providing a fluid fitting having a shank with a bore formed therethrough for receiving and passing fluid from the fluid supply; a hoop member attached to said shank and having a fluid port formed therein in fluid communication with said bore, said



hoop member defining a hoop body and two opposing hoop edges, and having an axis directed through the radial center thereof; a first tapered boss extending outwardly from a first of said opposing hoop edges, said first tapered boss defining a first sealing surface; and a second tapered boss extending outwardly from a second of said opposing hoop edges, said second tapered boss defining a second sealing surface;

providing a bolt for fitment through said hoop member and for threaded securement in a fluid receiving support structure, to secure said hoop member to said fluid receiving support structure, said bolt including a bolt sealing surface complementary to said first sealing surface;

forming a fluid channel in one of said bolt and said fluid receiving support structure in fluid communication with said fluid port formed in said hoop member for fluid flow from said fluid supply through said fitting to said fluid receiving support structure.

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